

10/633,718



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Eiji Teraue

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

MENBERU, BENIYAM

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/633,718

Applicant(s)

TERAUE, EIJI

Examiner

Beniyam Menberu

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/23/05, 8/5/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 5, lines 23-25, "of the present invention as mentioned above, the output device the additional image describing a reproduction property of a spot color reproduced in the proof image." is not complete sentence.

On page 21, line 19, "cannot spot color" is not grammatically correct.

On page 22, line 24, "closed" should be "close".

On page 23, line 8, "closed" should be "close".

On page 24, line 1, 115 should be 125.

On page 24, line 12, 113 should be 123.

On page 24, line 13, 114 should be 124.

On page 24, line 13, 115 should be 125.

On page 24, line 24, "closed" should be "close".

On page 26, line 19, 120 should be 210.

On page 36, line 6, "greater different" is not grammatically correct.

Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "101, 111", and "121" have both been used to designate

Art Unit: 2625

"Process Color Conversion Step". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "102, 113", and "123" have both been used to designate "Spot Color Reference Step". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2625

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "103, 114", and "124" have both been used to designate "Tone Arithmetic Step". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "112", and "122" have both been used to designate "Process Color Screening Step". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "115", and "125" have both been used to designate "Spot Color Screening Step". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 9 and 10 lines 1-2 should read "A computer readable medium storing a computer program which causes a computer".

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7068391 to Dewitte et al further in view of U.S. Patent No. 6304345 to Patton et al.

Regarding claims 1 and 9 (column 8, lines 1-10), Dewitte et al disclose an image processing apparatus wherein when an output device is used to output a proof image reproducing a printed image in which a process color print image constituting of process colors and a spot color print image are superposed upon each other, proof image data for the output device, that is representative of the proof image, is created through processing of printing image data representative of the printed image (column 7, lines 49-57; column 8, lines 22-29), the image processing apparatus comprising:

an image data obtaining section that obtains the printing image data (column 8, lines 22-29);

an image data conversion section that converts the printing image data obtained in the image data obtaining section into the proof image data through processing of the printing image data presupposing a reproduction system for the printed image in the output device (Figure 2, reference 213-217, 219; column 9, lines 41-67; column 10,

Art Unit: 2625

lines 1-22); an image data output section that outputs to the output device the proof image data converted in the image data conversion section (Figure 1a reference 110, 112; column 7, lines 32-47; Figure 2, reference 108, 219; column 15, lines 26-30;)

However Dewitte et al does not disclose an additional image data creating section that creates additional image data for the output device, which is representative of an additional image describing a reproduction property of a spot color in the reproduction system presupposed when the image data conversion section processes printing image data;

an image data output section that outputs to the output device the proof image data converted in the image data conversion section and the additional image data created in the additional image data creating section, so that the output device outputs the proof image and the additional image.

Patton et al disclose an additional image data creating section that creates additional image data for the output device (Figure 1, reference 14; column 4, lines 40-67; column 5, lines 1-15;), which is representative of an additional image describing a reproduction property/system (column 5, lines 13-18) of/for a spot color in the reproduction system presupposed when the image data conversion section processes printing image data (column 5, lines 1-46; column 6, lines 34-65; The spot colors can be red, green, blue.);

an image data output section that outputs to the output device the proof image data converted in the image data conversion section and the additional image data created in the additional image data creating section, so that the output device outputs the proof

Art Unit: 2625

image and the additional image (column 4, lines 40-55; The image 12 can serve as proof.).

Regarding claims 5 and 10, (see rejection above for claim 1), further Dewitte et al discloses an image data obtaining section that obtains the printing image data having a first image data portion representative of the process color print image and a second image data portion representative of the spot color print image (column 8, lines 17,29).

Regarding claim 6, Dewitte et al in view of Patton et al teaches all the limitations of claim 1. Further Patton et al discloses an image processing apparatus according to claim 1, wherein the additional image data creating section creates additional image data representative of an additional image describing a sort of ink used when the output device reproduces the spot color (column 7, lines 5-14, 53-58; column 5, lines 13-20).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 7068391 to Dewitte et al further in view of U.S. Patent No. 6304345 to

Patton et al further in view of JP 04-284579 to Yamada.

Regarding claim 2, Dewitte et al in view of Patton et al teach all the limitations of claim 1. However Dewitte et al in view of Patton et al does not disclose an image processing apparatus according to claim 1, wherein the additional image data creating section creates additional image data representative of an additional image describing whether the spot color in the printed image is a color within a color reproduction area of the output device.

Yamada discloses wherein the additional image data creating section creates additional image data representative of an additional image describing whether the spot color in the printed image is a color within a color reproduction area of the output device (see Constitution).

Dewitte et al, Patton et al, and Yamada are combinable because they are in the similar problem area of color data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color reproduction area determination of Yamada with the system of Dewitte et al in view of Patton et al to implement color reproduction judgment data as additional image data.

The motivation to combine the reference is clear because the result of the color area judgment is useful in determining whether additional processing is required (see Constitution last 3 sentence of Yamada reference).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7068391 to Dewitte et al in view of U.S. Patent No. 6304345 to Patton et al further in view of U.S. Patent Application Publication US 2003/0016942 A1 to Tojo et al.

Regarding claim 3, Dewitte et al in view of Patton et al teach all the limitations of claim 1. However Dewitte et al in view of Patton et al does not disclose an image processing apparatus according to claim 1, wherein the additional image data creating section creates additional image data representative of an additional image describing with numerical values ranks where a degree of the reproduction property is divided into a plurality of ranks.

Tojo et al disclose wherein the additional image data creating section creates additional image data representative of an additional image describing with numerical values ranks where a degree of the reproduction property is divided into a plurality of ranks (page 4, paragraph 54; "Q"; page 5, paragraph 59; Figure 6, the quality is described using Low=0 and High=1 which are numerical ranks.).

Dewitte et al, Patton et al, and Tojo et al are combinable because they are in the similar problem area of color data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the numerical ranking of image data used by Tojo et al with the system of Dewitte et al in view Patton et al to implement numerical ranking of image reproduction data.

The motivation to combine the reference is clear because Tojo et al system can use the quality parameter for improving the image reproduction process (page 1, paragraph 3, 4, 5).

Art Unit: 2625

13. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7068391 to Dewitte et al in view of U.S. Patent No. 6304345 to Patton et al further in view of US 2004/0001208 A1 to Murakami.

Regarding claim 4, Dewitte et al in view of Patton et al teaches all the limitations of claim 1. However Dewitte et al in view of Patton et al does not disclose an image processing apparatus according to claim 1, wherein the additional image data creating section creates additional image data representative of an additional image associating a color chip of the spot color constituting the spot color print image with a description of reproduction property.

Murakami discloses wherein the additional image data creating section creates additional image data representative of an additional image associating a color chip of the spot color constituting the spot color print image with a description of reproduction property (page 3, paragraph 39, 40, 41, 42).

Dewitte et al, Patton et al, and Murakami are combinable because they are in the similar problem area of color data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color chip of Murakami with the system of Dewitte et al in view of Patton et al to implement color chip for print proofing.

The motivation to combine the reference is clear because the system of Murakami provides an accurate color printing system (page 1, paragraph 10).

Regarding claim 7, Dewitte et al in view of Patton et al teaches all the limitations of claim 1. Further Murakami discloses an image processing apparatus according to

Art Unit: 2625

claim 1, wherein the additional image data creating section creates additional image data representative of an additional image associating a color chip of the spot color with a description of reproduction system for the spot color (page 3, paragraph 40, 41, 42).

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7068391 to Dewitte et al in view of U.S. Patent No. 6304345 to Patton et al further in view of US 2003/0197878 to Metois et al.

Regarding claim 8, Dewitte et al in view of Patton et al teaches all the limitations of claim 1. Further Dewitte et al disclose an image processing apparatus according to claim 1, wherein the output device reproduces the spot color by superposing inks of process colors using a specified halftone dot pattern (column 5, lines 1-8), however Dewitte et al in view of Patton et al does not disclose the additional image data creating section creates additional image data representative of an additional image describing a sort of the halftone dot pattern.

Metois et al disclose the additional image data creating section creates additional image data representative of an additional image describing a sort of the halftone dot pattern (page 6, paragraph 66, 68).

Dewitte et al, Patton et al, and Metois et al are combinable because they are in the similar problem area of color data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the halftone system of Metois et al with the system of Dewitte et al in view of Patton et al to implement halftone description in images.

The motivation to combine the reference is clear because the system of Metois et al can be used for security purpose in imaging system (page 6, paragraph 66).

Other Prior Art Cited

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5936749 to Ikeda discloses color processing system.

U.S. Patent No. 6226103 to Klassen et al disclose spot color printing.

U.S. Patent No. 7032517 to Bestmann disclose spot color printing.

U.S. Patent No. 7158670 to Fushiki et al disclose color expanding system.

U.S. Patent Application Publication Pub. No. US 2002/0159083 A1 to Arai et al disclose color processing system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2625

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

06/10/2007

K.A. Williams
Primary Examiner